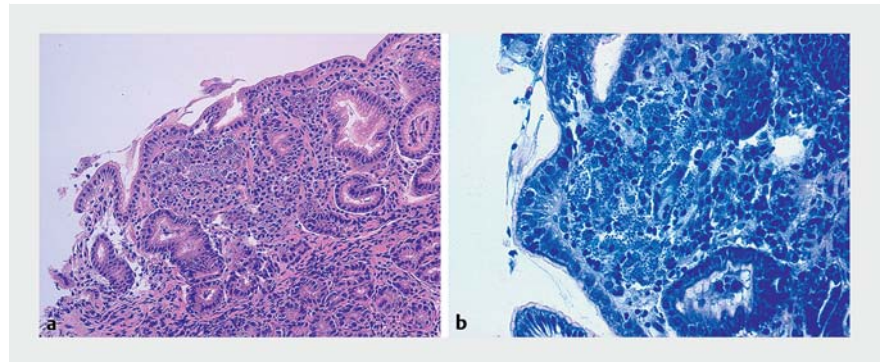


## Intestinal leishmaniasis: a rare case of enteropathy

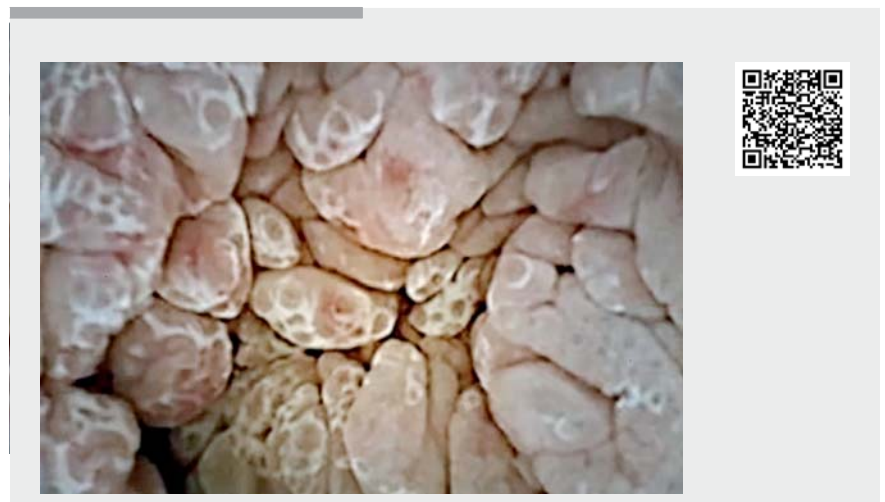
We report the case of a 34-year-old immunosuppressed woman who presented with severe malabsorption and weight loss. Her history was remarkable for systemic lupus erythematosus (SLE) complicated by antiphospholipid syndrome, lupus nephritis, and recurrent myocardial pericarditis; she had been treated with combined intensive immunosuppressive regimens. Her antitransglutaminase antibodies were negative and a flare-up of SLE was excluded.

Esophagogastroduodenoscopy revealed remarkable atrophy of the duodenal mucosa, which appeared atypical for both celiac and Whipple disease. A small-bowel capsule endoscopy was performed for disease staging and lesion characterization and showed severe diffuse enteropathy with flattened and enlarged edematous villi and sparse hyperemic foci from the duodenum to the middle portion of the ileum, compatible with severe diffuse enteropathy (► **Video 1**). A subsequent histopathological assessment on small-bowel mucosal biopsies showed the presence of severe mucosal atrophy with amastigotes of *Leishmania* protozoa (► **Fig. 1**), thereby confirming the diagnosis of visceral leishmaniasis. Owing to resistant to amphotericin B, she was successfully treated with intravenous pentamidine.

Visceral leishmaniasis is a life-threatening parasitic systemic disease caused by species of the *Leishmania* genus, typically presenting with fever, hepatosplenomegaly, and pancytopenia [1]. Atypical presentations are also found in immunosuppressed and human immunodeficiency virus (HIV)-infected patients [2]. In such cases, *Leishmania* parasites are usually detected in abnormal tissues, such as in the intestinal mucosa [3]. The course is characterized by treatment failure and relapses, and the prognosis is poor [2]. This case is interesting for several reasons. First, we describe an unusual case of small-bowel leishmaniasis, which pre-



► **Fig. 1** Histology of the duodenal biopsy showing numerous macrophages in the lamina propria of the duodenal mucosa, with abundant intracytoplasmic *Leishmania* amastigote parasites on: **a** hematoxylin and eosin (H&E) staining (magnification  $\times 200$ ); **b** Giemsa staining ( $\times 200$ ).



► **Video 1** Small-bowel capsule endoscopy showing severe diffuse enteropathy with flattened and enlarged edematous villi and hyperemic foci from the duodenum to the middle portion of the ileum, compatible with intestinal leishmaniasis.

sented clinically with the typical symptoms of severe malabsorption. In addition, for the first time we provide detailed video and imaging documentation of a *Leishmania*-driven enteropathy to further support clinicians and endoscopists during their everyday practice.

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### Competing interests

The authors declare that they have no conflict of interest.

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